

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently amended) A gasket comprising a substantially square or rectangular unitary frame comprising a plasticized resin and having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.
2. (Original) A gasket as claimed in Claim 1, in which the liner is made of polytetrafluoroethylene.
3. (Original) A gasket as claimed in Claim 1, in which the inner peripheral edge is part-circular in cross-section.
4. (Original) A gasket as claimed in Claim 1 provided with holes to accommodate sealing bolts.
- 5-6. (Cancelled).
7. (Original) A gasket as claimed in Claim 1 in which the opposite faces of the gasket are planar.
8. (Currently amended) A gasket comprising a substantially unitary frame comprising a plasticized resin and having an inner peripheral edge and an outer peripheral edge and including a protrusion or nose at its inner and/or outer peripheral edge, the protrusion or nose being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and

continuously cured inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

9. (Original) A gasket as claimed in Claim 8, in which the protrusion or nose extends around substantially the entire perimetral length of the frame.

10. (Original) A gasket as claimed in Claim 8, which the protrusion or nose is provided on the inner peripheral edge of the gasket frame.

11. (Cancelled).

12. (Original) A gasket as claimed in Claim 10, in which the protrusion or nose is of curved bulbous configuration.

13. (Cancelled).

14. (Currently amended) A gasket as claimed in Claim ~~43~~ 8, in which the liner is made of polytetrafluoroethylene.

15. (Original) A gasket as claimed in Claim 8 in which the protrusion or nose is of a shape capable of effecting a pinch seal when used with a second gasket in the form of a frame having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge of the gasket being of continuously curved convex configuration and being provided with a liner of chemically resistant material conforming with the continuously curved inner peripheral edge.

16. (Original) A gasket as claimed in Claim 8 in which the gasket is provided with a protrusion or nose on opposite sides thereof.

17. (Currently amended) A gasket as claimed in Claim 8 in which at least one side of the gasket is planar and wherein the frame is locally enlarged at its inner peripheral edge to form said nose which projects beyond the plane of the gasket on said at least one side thereof to effect sealing contact.

18. (Previously presented) A gasket as claimed in Claim 8 wherein said frame is suitable for compression together with the frame of a second gasket of similar configuration between a pair of flanges, the protrusion being resilient for effecting a pinch seal with a similar protrusion on a second gasket.

19. (Currently amended) A gasket effective for compression together with a frame of a second gasket of similar configuration between a pair of flanges, comprising, a substantially unitary frame comprising a plasticized resin and having a resilient protrusion on one side thereof for effecting a pinch seal with a similar protrusion on a second gasket, the resilient protrusion being located at or adjacent the inner periphery of the frame and remote from the outer periphery of the frame, said protrusion being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

20. (Currently amended) A gasket as claimed in claim 20 19, wherein the chemically resistant liner comprises polytetrafluoroethylene.

21. (Cancelled)

22. (Currently amended) The gasket of claim ~~24~~ 1 wherein the cross-section of the frame is of rectangular cross section with the dimension perpendicular to the gasket plane being smaller than the dimension in the plane of the gasket.

23. (Previously presented) The gasket of claim 1 wherein said liner is of substantially uniform thickness.

24. (Previously presented) The gasket of claim 8 wherein said liner is of substantially uniform thickness.

25. (Previously presented) The gasket of claim 19 wherein said liner is of substantially uniform thickness.
26. (Cancelled)
27. (Currently amended) A gasket according to claim 26 1, wherein the plasticized resin comprises an EPDM resin.
28. (Previously presented) A gasket according to claim 27, wherein the liner comprises polytetrafluoroethylene.
29. (Previously presented) A gasket according to claim 1, wherein the liner is U-shaped and wherein the interior space defined by the U-shaped liner is substantially completely filled with the material of which the frame is composed.
30. (Previously presented) A gasket according to claim 8, wherein the liner is U-shaped and wherein the interior space defined by the U-shaped liner is substantially completely filled with the material of which the frame is composed.
31. (Previously presented) A gasket according to claim 19, wherein the liner is U-shaped and wherein the interior space defined by the U-shaped liner is substantially completely filled with the material of which the frame is composed.
- 32-33. (Cancelled)
34. (New) A filterpress bipolar electrolyser comprising
a current distributor,
at least two bipolar units mounted on a mounting frame and assembled in series both mechanically and electrically,
adjacent anode and cathode structures having flanges,
a separator between the flanges of the adjacent anode and cathode electrode structures, and

a gasket sealing the separator between said flanges, wherein said gasket comprises a unitary frame comprising a plasticized resin and having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

35. (New) A method for refurbishing a filterpress bipolar electrolyser which includes a current distributor, at least two bipolar units mounted on a mounting frame and assembled in series both mechanically and electrically, adjacent anode and cathode structures having flanges, and a separator between the flanges of the adjacent anode and cathode electrode structures, said method comprising, providing a gasket for sealing the separator between said flanges, wherein said gasket comprises a unitary frame comprising a plasticized resin and having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

36. (New) A gasket for sealing a separator between the flanges of adjacent anode and cathode electrode structures, wherein said sealed separator-anode-cathode-structure is adapted for use in a bipolar electrolyser, said gasket comprising a unitary frame comprising a plasticized EPDM resin and having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

37. (New) A gasket according to claim 36, wherein the anode structure and cathode structure each include a pan, wherein the pan of the anode structure

includes inwardly projecting projections and the pan of the cathode structure includes outwardly projecting projections and wherein the pans of the anode structure and of the cathode structure are bonded to each other, such that the inwardly projecting projections mate with the outwardly projecting projections.

38. (New) A gasket for use in a module which includes an anode structure and a cathode structure, and a separator disposed between the anode plate and the cathode plate, such that the anode surface is substantially parallel to and faces but is insulated and spaced apart from the cathode surface by the separator which thereby divides the module into separate anode and cathode compartments;

said gasket sealing the separator between flanges on the periphery of the anode and cathode structures, whereby applying pressure to the gasket hermetically seals the separator to the gasket;

said gasket comprising, a square or rectangular substantially unitary frame comprising a plasticized resin and having an inner peripheral edge and an outer peripheral edge, the inner peripheral edge being convex and of continuously curved configuration over the full width of the gasket and being provided with a liner of chemically resistant fluorocarbon material conforming with the convex and continuously curved inner peripheral edge and a portion of the frame in addition to the inner peripheral edge.

39. (New) A gasket for use in a module according to claim 38, wherein the plasticized resin is an EPDM resin.

40. (New) A gasket for use in a module according to claim 39, wherein the liner comprises polytetrafluoroethylene.

41. (New) A modular bipolar electrolyser which comprises one or more modules assembled on a mounting frame, the modules being in series both mechanically and electrically where two or more modules are provided; and current distribution plates at each end of the electrolyser, each module comprising

(a) an anode structure and a cathode structure;

(b) a separator disposed between the anode plate and the cathode plate such that the anode surface is substantially parallel to and faces but is insulated and spaced apart from the cathode surface by the separator which thereby divides the module into separate anode and cathode departments; and

(c) a gasket sealing the separator between the flanges on the periphery of the pans;

whereby applying pressure to the gasket hermetically seals the separator therebetween;

said gasket comprising a gasket according to claim 27.

42. (New) A modular bipolar electrolyser apparatus according to claim 41, wherein the liner comprises polytetrafluoroethylene.